COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Ayers Pit	**MINE/PROSPECTING ID#:** M-1981-004	**MINERAL:** Sand and gravel	**COUNTY:** Morgan
INSPECTION TYPE: Monitoring	**INSPECTOR(S):** Brock Bowles	**INSP. DATE:** October 15, 2021	**INSP. TIME:** 12:00
OPERATOR: Dilleys Sand & Gravel	**OPERATOR REPRESENTATIVE:** Chris Monahan	**TYPE OF OPERATION:** 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:**	**BOND AMOUNT:** $28,120.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Clear	**INSPECTOR'S SIGNATURE:** Brock Bowles	**SIGNATURE DATE:** October 28, 2021

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Revegetation
PROBLEM/POSSIBLE VIOLATION: Problem: Several plants of myrtle spurge were noted in the middle of the mined area. Myrtle spurge is a Class A state-listed noxious weed. This is a problem for failure to employ weed control methods for state listed noxious weed species within the permitted area, and to reduce the spread of weeds to nearby areas as required by Section 3.1.10 (6) of the rule.
CORRECTIVE ACTIONS: Implement the approved weed control plan in accordance with the county extension agency, or weed control district office. Provide photo documentation proof to the Division that the plan has been implemented. The photo documentation is due by November 30, 2021.
CORRECTIVE ACTION DUE DATE: 11/30/21

OBSERVATIONS

This inspection was conducted by Brock Bowles of the Division of Reclamation, Mining and Safety (Division). Mr. Chris Monahan representing Dilley's Sand and Gravel (operator) was present for the inspection. The Ayers Pit is located about 7 miles northeast of Fort Morgan. The site is a 112c operation with 11.2 acres permitted. The approved post mining land use is wildlife habitat. The weather was clear, warm and the ground was dry. This inspection was carried out as a part of the Division's routine monitoring inspection program.

The permit entrance sign was in place (photo 1) and the permit boundary was marked with t-posts.

A front-end loader was on site but no mining was taking place during the inspection (photo 2). Several stockpiles were located on the pit floor. The topsoil was removed from the top of the highwall. Topsoil was stockpiled above the highwall in a long pile.

Myrtle spurge plants were growing in a pond area in the middle of the pit area (photo 3). Myrtle spurge is a Class A state listed noxious weed and needs to be eradicated from the site. See the possible problem box above for more information. A Colorado Dept. of Agriculture fact sheet about myrtle spurge is attached to this report. It contains recommended management practices and additional resources.

PHOTOGRAPHS

Photo 1 – Mine entrance sign facing CR 23

Photo 2 – Southeast corner post

Photo 3 – Myrtle spurge, Class A state listed noxious weed

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS---------- N	**(FN) FINANCIAL WARRANTY-------- N**	**(RD) ROADS---------- N**
(HB) HYDROLOGIC BALANCE---------- Y	**(BG) BACKFILL & GRADING---------- N**	**(EX) EXPLOSIVES--------- N**
(PW) PROCESSING WASTE/TAILING---- N	**(SF) PROCESSING FACILITIES------- N**	**(TS) TOPSOIL---------- Y**
(MP) GENL MINE PLAN COMPLIANCE- Y	**(FW) FISH & WILDLIFE---------- N**	**(RV) REVEGETATION---- PB**
(SM) SIGNS AND MARKERS---------- N	**(SP) STORM WATER MGT PLAN---- N**	**(RS) RECL PLAN/COMP-- N**
(ES) OVERBURDEN/DEV. WASTE--------- N	**(SC) EROSION/SEDIMENTATION--- N**	**(ST) STIPULATIONS------- N**
(AT) ACID OR TOXIC MATERIALS------- N	**(OD) OFF-SITE DAMAGE----------N**	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

Inspection Contact Address
Chris Monahan
Dilleys Sand & Gravel
1914 Edmunds St.
Brush, CO 80723

Enclosure: Myrtle spurge Fact Sheet, CO Dept. of Ag

CC:

Myrtle spurge

Colorado Department of Agriculture

305 Interlocken Pkwy
Broomfield, CO 80021

(303) 869-9030
weeds@state.co.us

Myrtle spurge Identification and Management

Identification and Impacts

Myrtle spurge *(Euphorbia myrsinites)* is a low growing perennial with trailing fleshy stems. The leaves are fleshy, blue-green and alternate. Flowers are inconspicuous with yellow-green, petal-like bracts that appear from March to May. Myrtle spurge spreads by seed and plants are capable of projecting seeds up to 15 feet. The plant grows from a taproot, with new stems emerging in early spring and dying back in the winter. Plants can grow up to 8-12 inches high and 12-18 inches in width.

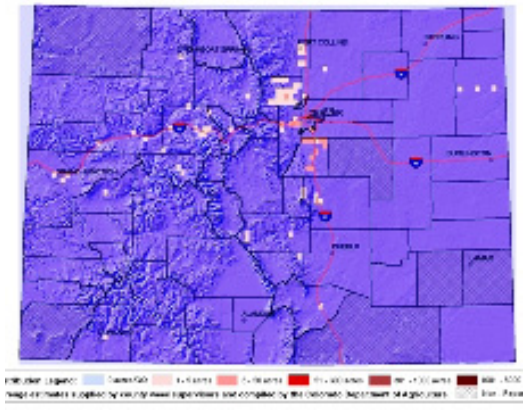
Myrtle spurge contains a toxic, milky sap which can cause severe skin irritations, including blistering. This plant is poisonous if ingested; causing nausea, vomiting and diarrhea. Wearing gloves, long sleeves, shoes, and eye protection is highly recommended when in contact with myrtle spurge, as all plant parts are considered poisonous.

Myrtle spurge is an invasive ornamental that is native to Eurasia. It is popular with xeriscapes and rock gardens, preferring sunny to partly sunny areas and well drained soils. Myrtle spurge rapidly escapes gardens and invades sensitive ecosystems, out competing native vegetation and reducing wildlife forage. Alternatives to planting myrtle spurge include native plants such as sulphur flower (*Erigonum umbellatum*), Kinnikinnick *(artcostaphylos uvursi*), or creeping mahonia (*Mahonia repens*). The soil seed reserve of myrtle spurge is estimated to be eight years. The site must be monitored for at least nine years after the last flowering adult plants have been eliminated and treatments repeated when necessary.

The key to effective control of myrtle spurge is to remove plants prior to seed set and to detect and remove new populations in natural areas early on. Small areas can be easily removed by mechanical means but should be done early to prevent triggering seed launching. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Myrtle spurge is designated as a "List A" species in the Colorado Noxious Weed Act. It is designated for statewide eradication. For more information visit www.colorado.gov/ag/weeds and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.

Map of myrtle spurge infestation.



Key ID Points

1. Low growing plant with blue-green, waxy leaves.
2. Flowers are yellow-green petal like bracts that appear from March to May.

Updated on: 7/2015

Euphorbia myrsinites

Photos © Kelly Uhing, Colorado Department of Agriculture and (above) Crystal Andrews, Colorado Department of Agriculture.

Management Recommendations

CULTURAL
Keeping desirable vegetation healthy and thick will help keep invaders out. Prevent the establishment of new infestations by minimizing disturbance and seed dispersal. Survey your land regularly to detect new invaders and eradicate any new populations quickly.

BIOLOGICAL
Biocontrol is not an approved method of contol for State List A species. Eradication as the management objective for all List A species. For more information on insect biocontrol in Colorado, please contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916

MECHANICAL
Hand pull or dig when soil is moist. Make certain to pull all the roots and wear rubber gloves and eye protection to protect yourself from the toxic milky sap. Treatment follow up is important to check root fragment resprouts that will occure when the tap root is severed too shallow.

Integrated Weed Management:

Since Myrtle spurge spreads mainly by seed, it is very important to prevent seed production and deplete the seed bank. Remove mature plants prior to setting seed and seedlings whenever present.

Populations can be managed mechanically and by spot treatment of herbicides. It is important to be persistent with follow up treatments for many years.

Myrtle spurge

HERBICIDES

NOTE: The following are recommendations for herbicides that can be applied to range and pasturelands. Rates are approximate and based on equipment with an output of 30 gal/acre. Please read label for exact rates. **Always read, understand, and follow the label directions. The herbicide label is the LAW!**

Herbicide	Rate	Application Timing
2,4-D ester	2 qt./acre + 1% v/v methylated seed oil	Use a 2,4-D ester formulation that has a 4.0 lbs. active ingredient/acre. Apply during spring or during fall regrowth.
Dicamba + 2,4-D	1 pint/acre dicamba + 2-3 pints/acre 2,4-D (amine or ester)	Use a 2,4-D formulation that has a 4 lbs. active ingredient/gallon. Apply during spring or during fall regrowth.
Picloram (Tordon/Picloram 22K - Restricted use pesticide) + 2,4-D	20 oz./acre + 2-3 pints/acre 2,4-D (amine or ester)	Apply at flowering growth stage during spring or to fall regrowth. DO NOT use near trees, desirable shrubs, water, or high water table.

Additional herbicide recommendations for other species can be found at:
https://goo.gl/VFPCUv

Top to bottom photos © Unknown, A. Murray, Univ. of Florida; USDA ARS Archive; and unknown.